



UNITED STATES PATENT AND TRADEMARK OFFICE

GO

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/767,246	01/28/2004	Lakshmana Rao Chintada	101948016US1	4788

30083 7590 06/08/2005

PERKINS COIE LLP/AWS
P.O. BOX 1247
SEATTLE, WA 98111-1247

EXAMINER

TORRES, JOSEPH D

ART UNIT	PAPER NUMBER
----------	--------------

2133

DATE MAILED: 06/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/767,246

Applicant(s)

CHINTADA ET AL.

Examiner

Joseph D. Torres

Art Unit

2133

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 28 January 2004.
- 2a) ☐ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 5-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 5-31 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☒ Interview Summary (PTO-413)
Paper No(s)/Mail Date. 20050531.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

RD

DETAILED ACTION

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 5-15, 19 and 20, drawn to A method of implementing a sliding window protocol for transmitting frames in a communication system, the method comprising, at a data receiving unit, identifying a failure to successfully receive a frame sent over a first channel from a data sending unit implementing a sliding window under the sliding window protocol and sending a request for retransmission of the lost frame over the established second channel, and wherein use of the second channel allows the sliding window at the data sending unit to be advanced beyond the sequence number of the lost frame prior to receiving an acknowledgement of receipt of the lost frame from the data receiving unit, classified in class 714, subclass 748.
- II. Claims 16-18, drawn to A method of implementing a sliding window protocol for transmitting frames in a communication system, comprising, at a data receiving unit, identifying a failure to successfully receive, over a first channel, a lost frame sent from a data sending unit under a sliding window of the sliding window protocol and setting a first timer at the data receiving unit, wherein expiration of the first timer before

receipt of the lost frame results in resending the request for retransmission of the lost frame, classified in class 370, subclass 395.4.

III. Claims 21-25, 30 and 31, drawn to A method of implementing a sliding window protocol for transmitting frames in a communication system, the method comprising: **sending a frame to a data receiving unit**, wherein the frame is sent over a first channel; based on the sent frame, advancing a transmit sliding window, wherein **the transmit sliding window is advanced without receiving an acknowledgement of receipt of the sent frame from the data receiving unit**; receiving, via a second channel, a request to resend a previously sent frame that was identified by the data receiving unit as not successfully received; and **resending the previously sent frame over the second channel**, classified in class 714, subclass 821.

IV. Claims 26-29, drawn to A method of implementing a sliding window protocol for transmitting frames in a communication system, the method comprising: sending a frame to a data receiving unit, wherein the frame is sent over a first channel; based on the sent frame, advancing a transmit sliding window, wherein **the sliding window is advanced without receiving an acknowledgement of receipt of the sent frame**; receiving over a second channel a request for retransmission of the sent frame, wherein the sent frame was identified by the data receiving unit as not successfully received; based on the received request for retransmission,

setting a timer and resending the frame to the data receiving unit over the second channel; and if the timer expires before successful receipt of the resent frame by the receiver, resending the frame again and resetting the timer up to a maximum number of times, classified in class 714, subclass 376.

The inventions are distinct, each from the other because of the following reasons:

Inventions Group I through Group IV are related as subcombinations disclosed as usable together in a single combination. The subcombinations are distinct from each other if they are shown to be separately usable. In the instant case, invention Group I has separate utility such as for **a data receiving unit**, wherein use of a second channel allows the sliding window at the data sending unit to be **advanced beyond the sequence number of the lost frame** prior to receiving an acknowledgement of receipt of the lost frame from the data receiving unit. In the instant case, invention Group II has separate utility such as for **a data receiving unit that sets a first timer at the data receiving unit, wherein expiration of the first timer before receipt of the lost frame results in resending the request for retransmission of the lost frame**. In the instant case, invention Group III has separate utility such as for **sending a frame to a data receiving unit**, wherein the frame is sent over a first channel; based on the sent frame, advancing a transmit sliding window, wherein **the transmit sliding window is advanced without receiving an acknowledgement of receipt of the sent frame from the data receiving unit**; receiving, via a second channel, a request to resend a previously sent frame that was identified by the data receiving unit as not successfully

Art Unit: 2133

received; and **resending the previously sent frame over the second channel.** In the instant case, invention Group IV has separate utility such as for advancing a transmit sliding window, wherein **the sliding window is advanced without receiving an acknowledgement of receipt of the sent frame;** based on the received request for retransmission, **setting a timer and resending the frame to the data receiving unit over the second channel; and if the timer expires before successful receipt of the resent frame by the receiver, resending the frame again and resetting the timer up to a maximum number of times.** See MPEP § 806.05(d).

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and the search required for Group I through IV are mutually exclusive, restriction for examination purposes as indicated is proper.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

A telephone call was made to Christopher J. Daley-Watson on 5/23/2005 to request an oral election to the above restriction requirement, but did not result in an election being made.

Art Unit: 2133

Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

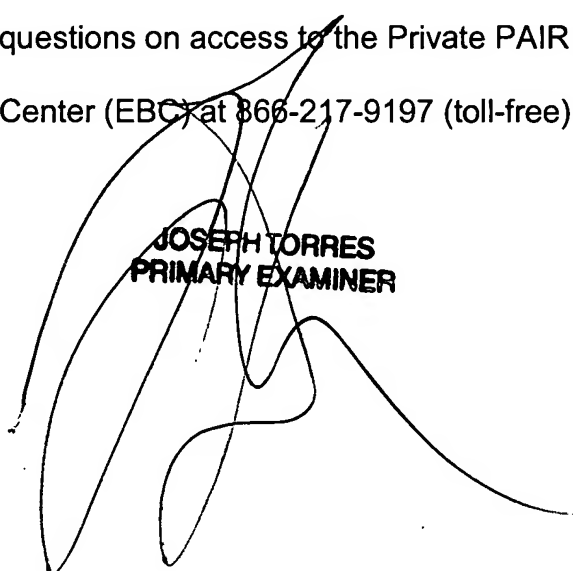
Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a request under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph D. Torres whose telephone number is (571) 272-3829. The examiner can normally be reached on M-F 8-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Albert Decady can be reached on (571) 272-3819. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Art Unit: 2133

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



**JOSEPH TORRES
PRIMARY EXAMINER**

Joseph D. Torres, PhD
Primary Examiner
Art Unit 2133

Examiner-Initiated Interview Summary	Application No.	Applicant(s)	
	10/767,246	CHINTADA ET AL.	
	Examiner	Art Unit	
	Joseph D. Torres	2133	

All Participants:
Status of Application: New Case

 (1) Joseph D. Torres.

(3) _____.

 (2) Christopher J. Daley-Watson.

(4) _____.

Date of Interview: 23 May 2005
Time: 1pm
Type of Interview:

- ☒ Telephonic
☐ Video Conference
☐ Personal (Copy given to: ☐ Applicant ☐ Applicant's representative)

Exhibit Shown or Demonstrated: ☐ Yes ☒ No
 If Yes, provide a brief description: N/A.

Part I.

Rejection(s) discussed:
N/A

Claims discussed:
N/A

Prior art documents discussed:
N/A

Part II.
SUBSTANCE OF INTERVIEW DESCRIBING THE GENERAL NATURE OF WHAT WAS DISCUSSED:

A telephone call was made to Christopher J. Daley-Watson on 5/23/2005 to request an oral election to the above restriction requirement, but did not result in an election being made.

Part III.

- ☐ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview directly resulted in the allowance of the application. The examiner will provide a written summary of the substance of the interview in the Notice of Allowability.
☐ It is not necessary for applicant to provide a separate record of the substance of the interview, since the interview did not result in resolution of all issues. A brief summary by the examiner appears in Part II above.

JOSEPH TORRES
 PRIMA

(Examiner/SPE Signature)

(Applicant/Applicant's Representative Signature – if appropriate)